AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior listings of claims in the application:

1. (Currently amended) A method for inhibiting and/or relieving ~~prophylaxis and/or treatment of~~ conditions caused or characterized by abnormal loss of cells in the central nervous system, comprising: administering to a subject in need thereof a pharmaceutical composition comprising a compound that is at least about about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, or at least about 99% identical to SEQ ID NO:2 ~~that when tested in an in vitro proliferation assay has an activity that corresponds to at least about 50% of an activity of SEQ ID NO 2 when tested in a same assay under the same conditions~~.

2. (Previously presented) The method according to claim 1, wherein the abnormal loss of cell is a degeneration of neuronal cells, or a loss of astrocytes or oligodendrocytes.

3. (Previously presented) The method according to claim 1, wherein the abnormal loss of cells is caused by traumatic, asphyxia, hypoxic, ischemic, toxic, infectious, degenerative or metabolic insults.

4. (Canceled)

5. (Previously presented) The method according to claim 1, wherein the abnormal loss of cells is caused by insults to the central or peripheral nervous system.

6. (Currently amended) The method according to claim [[4]] 3, wherein the conditions are selected from the group consisting of Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, amyotrophic lateral sclerosis, asphyxia or hypoxia, epilepsy, and diseases associated with ~~caused by~~ prions~~, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE)~~.

7. (Previously presented) The method according to claim 1, wherein the compound has an activity that corresponds to at least about 55%, at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2.

8. (Previously presented) The method according to claim 1, wherein the compound has an activity that corresponds to at least about 100%, at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2.

9. (Previously presented) The method according to claim 1, wherein the compound is identical to SEQ ID NO 2.

10-12. (Canceled)

13. (Currently amended) The method according to claim 1, wherein the compound is SEQ ID NO 2~~, analogues or fragments thereof~~.

14. (Withdrawn) A compound that, when tested in an in vitro proliferation assay, has an activity that corresponds to at least about 50% of an activity of SEQ ID NO 2 when tested in a same assay under same conditions with a proviso that the compound is not SEQ ID NO 2 or basic fibroblast growth factor BFGF.

15. (Withdrawn) A compound according to claim 14 for medicinal use.

16. (Withdrawn) A compound according to claim 14, said compound is administered to a subject for a prophylaxis and/or treatment of conditions caused by abnormal loss of cells.

17. (Withdrawn) A method comprising: administering to a subject an antagonist to GIP for a prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

18. (Withdrawn) A method comprising: administering to a subject an antibody against GIP for the prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

19. (Withdrawn) A method comprising: administering to a subject a pharmaceutical composition comprising an antagonist to the GIP receptor for a prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

20. (Withdrawn) The method according to claim 17, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small-cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

21. (Withdrawn) The method according to claim 17, wherein the conditions are selected from tumor-associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

22. (Currently amended) A method for inhibiting and/or relieving ~~prophylaxis or treatment of overweight and/or~~ obesity comprising: administering to a subject in need thereof a pharmaceutical composition comprising a compound that is at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, or at least about 99% identical to SEQ ID NO:2 ~~which when given intraventricularly in the brain of rats, followed by the recordation of the weight of each rat-~~

~~, the compound has an activity in reducing weight gain that corresponds to at least about 50% of the activity of SEQ ID NO 2 or SEQ ID NO 4 when tested in a same assay under same conditions using a compound having SEQ ID NO 2 or SEQ ID NO 4 as a control~~.

23. (Canceled).

24. (Previously presented) The method according to claim 22, wherein the compound has an activity that corresponds to at least about 55%, at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2 or SEQ ID NO 4.

25. (Previously presented) The method according to claim 22, wherein the compound has an activity that corresponds to at least about 100%, at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2 or SEQ ID NO 4.

26. (Previously presented) The method according to claim 22, wherein the compound is identical to SEQ ID NO 2 or SEQ ID NO 4.

27-29. (Canceled)

30. (Currently amended) The method according to claim 22, wherein the compound is SEQ ID NO 2 ~~or SEQ ID NO 4, analogues or fragments thereof~~.

31. (Withdrawn) A compound having an activity in reducing weight gain that corresponds to at least about 50% of an activity of SEQ ID NO 2 or SEQ ID NO 4 when the compound is given intraventricularly in the brain of rats, followed by the recordation of the weight of each rat when tested in a same assay under tsame conditions.

32. (Withdrawn) A compound according to claim 31 for medicinal use.

33. (Withdrawn) A compound according to claim 32, the compound provided for a prophylaxis and/or treatment of overweight and/or obesity.

34. (Withdrawn) A method of prophylaxis and/or treatment of overweight and/or obesity, the method comprising administering to a subject a pharmaceutical composition comprising a compound according to claim 31 by an intraventricular route.

35. (Withdrawn) A cosmetic method for reducing body weight, the method comprising administering to a subject a composition comprising a compound according to claim 31.

36. (Withdrawn) The method comprising: administering to a subject a pharmaceutical composition comprising an antagonist to GIP for a-prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

37. (Withdrawn) The method comprising: administering to a subject an antibody against GIP, for a prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

38. (Withdrawn) A method comprising: administering to a subject a pharmaceutical composition comprising an antagonist to the GIP receptor for a prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

39. (Withdrawn) The method according to claim 36, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

40. (Withdrawn) A pharmaceutical composition comprising a compound according to claim 14 together with one or more pharmaceutical acceptable excipients.

41. (Withdrawn) The method comprising: providing a compound having SEQ ID NO 2 or analogues, functional analogues or fragments thereof for a manufacture of a

pharmaceutical composition for prophylaxis and/or treatment of depression and/or mood disorders.

42. (Withdrawn) A method for determining an abnormal level of GIP in the brain of a mammal.

43. (Withdrawn) A method according to claim 42 for diagnosis, disease monitoring and/or therapeutic monitoring of a disease characterized by an abnormal amount of GIP in the brain.

44. (Withdrawn) A method according to claim 42, wherein the level of GIP in the brain of a subject is low compared to a healthy subject.

45. (Withdrawn) A method according to claim 42, wherein the level of GIP in the brain of a subject is high compared to a healthy subject.

46. (Withdrawn) The method according to claim 18, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small-cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

47. (Withdrawn) The method according to claim 18, wherein the conditions are selected from tumor-associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

48. (Withdrawn) The method according to claim 19, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small-cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma,

leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

49. (Withdrawn) The method according to claim 19, wherein the conditions are selected from tumor-associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

50. (Withdrawn) The method according to claim 37, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

51. (Withdrawn) The method according to claim 38, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

52. (Withdrawn) A pharmaceutical composition comprising a compound according to claim 31 together with one or more pharmaceutical acceptable excipients.

53. (Withdrawn) A pharmaceutical composition for prophylaxis and/or treatment of conditions caused or characterized by abnormal loss of cells, comprising: a compound that when tested in an in vitro proliferation assay has an activity that corresponds to at least about 50% of an activity of SEQ ID NO 2 when tested in a same assay under same conditions.

54. (Withdrawn) The composition according to claim 53, wherein the abnormal loss of cell is a degeneration of neuronal cells, or a loss of astrocytes or oligodendrocytes.

55. (Withdrawn) The composition according to claim 53, wherein the abnormal loss of cells is caused by traumatic, asphyxia, hypoxic, ischemic, toxic, infectious, degenerative or metabolic insults.

56. (Withdrawn) The composition according to claim 53, wherein the conditions are selected from the group comprising Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, asphyxia or hypoxia, heart failure, heart infarction, arthrosis or arthritis, skin disease and burn injuries, diabetes, liver diseases or failure, muscle diseases or damages, pancreatic dysfunction, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

57. (Withdrawn) The composition according to claim 53, wherein the abnormal loss of cells is caused by insults to the central or peripheral nervous system.

58. (Withdrawn) The composition according to claim 56, wherein the conditions are selected from the group consisting of Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, amyotrophic lateral sclerosis, asphyxia or hypoxia, epilepsy, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

59. (Withdrawn) The composition according to claim 53, wherein the compound has an activity that corresponds to at least about 55%, at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2.

60. (Withdrawn) The composition according to claim 53, wherein the compound has an activity that corresponds to at least about 100%, at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2.

61. (Withdrawn) The composition according to claim 53, wherein the compound is identical to SEQ ID NO 2.

62. (Withdrawn) The composition according to claim 53, wherein the compound has an identity corresponding to at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

63. (Withdrawn) The composition according to claim 53, wherein the compound is similar to SEQ ID NO 2.

64. (Withdrawn) The composition according to claim 53, wherein the compound has a similarity corresponding to at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

65. (Withdrawn) The composition according to claim 53, wherein the compound is SEQ ID NO 2, analogues or fragments thereof.